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EXAMINER	
CHOU, ANDREW Y	

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,528	PHILLIPS ET AL.	
	Examiner	Art Unit	
	Andrew Y. Chou	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-39 have been examined. Claims 1, 8, 16, 21, 29, 31, and 33 are the independent claims. The priority date recognized for this application is 7/15/2003.

Oath/Declaration

2. The Office acknowledges receipt of a properly signed oath/declaration filed on 07/15/2003.

Claim Objections

3. Claims 21,23, and 34-39 are objected to because of the following informalities:

In line 8 of claim 21, "instructions to call and external function" should instead read – instructions to call an external function --.

In line 2 of claim 23, "comprises instructions update the phase parameter" should instead read – comprises instructions to update the phase parameter --.

In line1 of claims 34-39, "The procedure" should instead read – The system --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-39 are rejected under 35 U.S.C 102 (e) as being anticipated by Mallory et al. US 6,988,262 B1 (hereinafter Mallory).

Claim 1:

Mallory discloses a method for structuring a procedure, comprising:

providing reply-handling logic within the procedure to control execution of the procedure according to a phase parameter, the phase parameter identifying one of a plurality of sub-procedures of the procedure (see for example column 8, lines 3-6),

identifying within the procedure a call to an external function (see for example column 8, lines 1-19), and

inserting a break point within the procedure associated with the external function call, thereby defining a sub-procedure of the procedure (see for example FIG. 5, and related text, "Set/Remove BreakEvent").

Claim 2:

Mallory further discloses the method of claim 1 wherein the reply-handling logic comprises logic to update the phase parameter (see for example column 8, lines 19-28).

Claim 3:

Mallory further discloses the method of claim 1 further comprising inserting logic to update the phase parameter in at least one of the plurality of sub-procedures (see for example column 8, lines 19-28).

Claim 4:

Mallory further discloses the method of claim 1 wherein the reply-handling logic employs conditional logic statements (see for example column 15, lines 6-14).

Claim 5:

Mallory further discloses the method of claim 1 wherein the reply-handling logic employs switch/case instructions (see for example column 15, lines 6-14).

Claim 6:

Mallory further discloses the method of claim 1 wherein the reply-handling logic employs test/branch instructions (see for example column 15, lines 6-14).

Claim 7:

Mallory further discloses the method of claim 1 wherein the reply-handling logic further comprises instance state logic to identify an instance of the procedure (see for example Fig. 4, step 410, and related text).

Claim 8:

Mallory discloses a method for executing a procedure having a plurality of sub-procedures, comprising:

executing a first sub-procedure of the procedure (see for example column 8, lines 6-18, "Procedure ExamineContent"),

calling an external function (see for example column 8, lines 1-19),

passing a phase parameter identifying one selected from the first sub-procedure and a second sub-procedure to the external function (see for example column 8, lines 3-6),

passing program control to the external function (see for example column 16, lines 1-16, "Call-Back Interface Procedures"), and

passing program control to the second sub-procedure based on the phase parameter upon execution of the external function (see for example column 15, lines 60-66).

Claim 9:

Mallory further discloses the method of claim 8 wherein passing the phase parameter identifying one selected from the first sub-procedure and the second sub-procedure comprises pushing the phase parameter onto a stack (see for example column 13, lines 2-12, "local call-stack").

Claim 10:

Mallory further discloses the method of claim 8 wherein the external function passes the phase parameter back with the program control (see for example column 8, lines 1-18).

Claim 11:

Mallory further discloses the method of claim 8 wherein the first sub-procedure updates the phase parameter (see for example column 8, lines 1-18).

Claim 12:

Mallory further discloses the method of claim 8 further comprising reply-handling logic to direct program control to the second sub-procedure based on the phase parameter (see for example column 15, lines 60-66).

Claim 13:

Mallory further discloses the method of claim 12 wherein the reply-handling logic updates the phase parameter (see for example column 8, lines 19-28).

Claim 14:

Mallory further discloses the method of claim 8 wherein the phase parameter is a local variable stored in the environment surrounding a module instance (see for example Fig. 1, item 105, "code module", and related text).

Claim 15:

Mallory further discloses the method of claim 8, further comprising:

analyzing an instance state parameter identifying a procedure instance (see for example Fig. 4, step 410, and related text), and

directing program control to the identified procedure instance based on the instance state (see for example Fig. 4, steps 415, 420, and related text).

Claim 16:

Mallory discloses a system (see for example Fig. 21, and related text) for structuring a procedure, comprising:

a processor (see for example Fig. 21, item 2102, and related text, "processor"),

a memory connected to the processor storing processor executable instructions to control operation of the processor (see for example Fig. 21, item 2104, and related text),

the processor executable instructions including;

instructions to provide reply handling logic within the procedure to control execution of the procedure according to a phase parameter, the phase

parameter identifying one of a plurality of sub-procedures of the procedure (see for example column 8, lines 3-6),

instructions to identify within the procedure a call to an external function (see for example column 8, lines 1-19),

instructions to insert a break point within the procedure associated with the external function call, thereby defining a sub-procedure of the procedure, and

instructions to insert logic to update the phase parameter (see for example FIG. 5, and related text, "Set/Remove BreakEvent").

Claim 17:

Mallory further discloses the system of claim 16 wherein the reply handling logic employs conditional logic statements.

Claim 18:

Mallory further discloses the system of claim 16 wherein the reply handling logic employs switch/case instructions.

Claim 19:

Mallory further discloses the system of claim 16 wherein the reply handling logic employs test/branch instructions (see for example column 15, lines 6-14).

Claim 20:

Mallory further discloses the system of claim 16 wherein the reply handling logic further comprises:

instructions to identify an instance state of the procedure (see for example Fig. 4, step 410, and related text), and

instructions to direct program control to a procedure instance as function of the instance state of the procedure (see for example Fig. 4, steps 415, 420, and related text).

Claim 21:

Mallory discloses a system (see for example Fig. 21, and related text) for executing a procedure having a plurality of sub-procedures comprising:

a processor (see for example Fig. 21, item 2102, and related text);

a memory connected to said processor storing processor executable (see for example Fig. 21, item 2104, and related text),

instructions to control operation of said processor, the processor executable instructions comprising;

instructions to execute a first sub-procedure (see for example column 8, lines 6-18, "Procedure ExamineContent"),

instructions to call and external function (see for example column 8, lines 1-19),

instructions to pass a phase parameter and program control to the external function (see for example column 8, lines 3-6),

instructions to direct program control to a second sub-procedure based on the phase parameter upon execution of the external function (see for example column 15, lines 60-66).

Claim 22:

Mallory further discloses the system of claim 21 wherein the passing the phase parameter to the external function comprises instructions to push the phase parameter onto a stack (see for example column 13, lines 2-12, "local call-stack").

Claim 23:

Mallory further discloses the system of claim 21 wherein the instructions to execute the first procedure comprises instructions update the phase parameter (see for example column 8, lines 1-18).

Claim 24:

Mallory further discloses the system of claim 21 wherein the processor executable instructions further comprise reply-handling logic to direct program control to the second sub-procedure based on the phase parameter (see for example column 15, lines 60-66).

Claim 25:

Mallory further discloses the system of claim 24 wherein the reply-handling logic further comprises instructions to update the phase parameter (see for example column 8, lines 19-28).

Claim 26:

Mallory further discloses the system of claim 24 wherein the processor executable instructions further comprise:

instructions to assign an instance state parameter to the procedure identifying a procedure instance (see for example Fig. 4, step 410, and related text);

instructions to analyze the instance state parameter identifying the procedure instance (see for example Fig. 4, step 410, and related text); and

instructions to direct program flow to the procedure instance identified by the instance state parameter upon execution of the external function (see for example Fig. 4, steps 415, 420, and related text).

Claim 27:

Mallory further discloses the system of claim 21, wherein the external function passes the phase parameter back upon execution of the external function (see for example column 8, lines 1-18).

Claim 28:

Mallory further discloses the system of claim 21, wherein the phase parameter is a local variable stored in the environment surrounding the module (see for example Fig. 1, item 105, "code module", and related text).

Claim 29:

Mallory discloses a computer-readable storage medium (see for example Fig. 21, and related text) comprising:

instructions for providing reply-handling logic within a procedure to control execution of the procedure according to a phase parameter, the phase parameter identifying one of a plurality of sub-procedures of the procedure (see for example column 8, lines 3-6),

instructions for identifying within the procedure a call to an external function (see for example column 8, lines 1-19),

instructions for inserting a break point within the procedure associated with the external function call, thereby defining a sub-procedure of the procedure (see for example FIG. 5, and related text, "Set/Remove BreakEvent"),

and instructions for inserting logic to update a phase parameter (see for example column 8, lines 19-28).

Claim 30:

Mallory further discloses the computer-readable storage medium of claim 29 wherein the instructions for providing reply handling logic within the procedure further comprise instructions to control execution of the procedure according to an instance state parameter, the instance state parameter identifying a procedure instance (see for example Fig. 1, item 150, "code module", column 6, lines 39-54).

Claim 31:

Mallory discloses a computer-readable storage medium (see for example Fig. 21, and related text) comprising:

instructions for executing a sub-procedure (see for example column 8, lines 6-18, "Procedure ExamineContent"),

instructions for communicating a phase parameter identifying one selected from a first sub-procedure and a second sub-procedure (see for example column 8, lines 3-6),

instructions for directing program flow to the external function (see for example column 16, lines 1-16, "Call-Back Interface Procedures"), and

instructions for directing program flow to a second sub-procedure as a function the phase parameter upon execution of the external function (see for example column 15, lines 60-66).

Claim 32:

Mallory further discloses the computer-readable storage medium of claim 31 further comprising:

instructions for communicating an instance state parameter identifying a procedure instance (see for example Fig. 4, step 410, and related text); and

instructions for directing program flow to the procedure instance identified by the instance state (see for example Fig. 4, step 410, and related text).

Claim 33:

Mallory discloses a system (see for example Fig. 21, and related text) for executing a procedure having a plurality of sub-procedures comprising:

means for identifying a plurality of sub-procedures (see for example column 8, lines 1-16, "subroutines"),

logic to call an external function (see for example column 8, lines 1-16),

means for communicating the identity of one selected from a first sub-procedure and a second sub-procedure to the external function (see for example, column 8, lines 1-16, "subroutine call"),

means for receiving a reply from the external function (see for example column 16, lines 1- 16, "Call-Back Interface Procedures"),

means for receiving the identity of the one selected from the first sub- procedure and the second sub-procedure from the external function (see for example column 8, lines 6-14, "Procedure ExamineContetx"),

logic to analyze the identity of the one selected from the first sub-procedure and the second sub-procedure received from the one external function (see for example Fig. 6, and related text), and

logic to pass control to the second sub-procedure as a function of the identity of the one selected from the first sub-procedure and the second sub-procedure (see for example Fig. 6, and related text).

Claim 34:

Mallory further discloses the system of claim 33 wherein the plurality of sub-procedures are defined as a function of a call to an external function (see for example column 8, lines 1-19).

Claim 35:

Mallory further discloses the system of claim 33 wherein the means for identifying the plurality of sub-procedures comprises a phase parameter (see for example column 8, lines 3-6).

Claim 36:

Mallory further discloses the system of claim 33 wherein the means for identifying the plurality of sub procedures further comprises an instance state parameter for identifying a procedure instance (see for example Fig. 4, step 410, and related text).

Claim 37:

Mallory further discloses the system of claim 33 wherein the means for communicating the identity of the one selected from the first sub-procedure and the second sub-

procedure comprises storing the at least one parameter in a local environment (see for example Fig. 4, step 410, and related text).

Claim 38:

Mallory further discloses the system of claim 33 wherein the means for communicating the identity of the one selected from the first sub-procedure and the second sub-procedure comprises pushing the a parameter onto a stack and pulling the parameter off the stack upon execution of the external function (see for example column 13, lines 2-12, "local call-stack").

Claim 39:

Mallory further discloses the system of claim 33, wherein the means for receiving the identity of the one selected from the first sub-procedure and the second sub-procedure from the external function comprises passing the identity of the one selected from the first sub- procedure and the second sub-procedure back in the external function's response (see for example Fig. 6, and related text).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Chou whose telephone number is (571) 272-6829. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm. If

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached on (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed tot eh TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

AYC

TUAN DAM
SUPERVISORY PATENT EXAMINER